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EXAMINER	
BAUGH, APRIL L	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/539,459	Applicant(s) KING, ALLEN	
	Examiner April L Baugh	Art Unit 2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-53* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 March 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☒ Other: *See Continuation Sheet* .

Continuation of Attachment(s) 6). Other: Notice to File Missing Parts of Nonprovisional Application.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 1, 3-5, 32-37, 39-47, and 49-52 rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,470,385 to Nakashima et al. in view of Giorgio et al.

Regarding claim 1, Nakashima et al. teaches a method for communicating a change in said subsystem status or in a component in or coupled to said subsystem without polling by said host processor on a periodic basis (column 1, lines 8-9 and 59-62 of Nakashima et al.), and monitoring, by said subsystem, said predetermined component status and when any one of said component status changes by a predetermined amount: (i) reestablishing said communications link with said host processor, and (ii) communicating said changed status to said host processor (column 2, lines 43-46 and column 4, lines 41-43 of Nakashima et al.).

Nakashima et al. does not teach a host processor and read commands. Giorgio et al. teaches system of the type having a host processor (column 1, line 34 of Giorgio et al.) and a subsystem coupled to said host processor said method comprising: establishing a communication link between said host processor and said subsystem; communicating a selected status read command by said host processor to said subsystem instructing said subsystem to self-monitor predetermined component status and to send component status upon said subsystem detecting a

change in said status; terminating said communications link (column 2, lines 53-59 of Giorgio et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. by having a host processor and read commands because the processor processes the information and a read command is needed to read the status of the device.

Regarding claim 5, Nakashima et al. teaches the method in claim 2 (column 1, lines 8-9 and 59-62 of Nakashima et al.).

Nakashima et al. does not teach of SCSI. Giorgio et al. teaches said communication link comprises a Small Computer System Interface (SCSI) communication bus supporting SCSI commands and protocol (column 1, lines 29-31 of Giorgio et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. by having SCSI because this is a type of communication protocol.

Regarding claim 32, Nakashima et al. teaches a method for determining if a target device supports a change status command, sending, by said selected target device, the requested inquiry data to said host adapter and receiving said inquiry data by said host adapter; determining if a flag (column 10, lines 52-56 of Nakashima et al.) in said inquiry data is a first predetermined logic state; and enabling said device for change status commands only if said flag has said first predetermined logic state and enabling said device for polled status commands if said flag does not have said first predetermined logic state (column 1, lines 38-41 of Nakashima et al.).

Nakashima et al. does not teach of a host adaptor. Giorgio et al. teaches said method comprising steps of selecting, by a host adapter, a particular selected target device; sending, by

said host adapter, an inquiry command to said selected target device (column 3, lines 21-23 and 26 of Giorgio et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. by having a host adaptor because messages are sent through the host adaptor.

Referring to claim 34 [44], Nakashima et al. teaches the method in Claim 32 [42] and poll status (column 1, lines 42-46 of Nakashima et al.).

Nakashima et al. does not teach read and write commands. Giorgio et al. teaches said polled status commands are selected from the group consisting of a Write Device Slot Status command, a Read Device Slot Status command, and Read Enclosure Status command (column 2, lines 53-59 of Giorgio et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. by having read and write commands because these are used to receive and store status information.

Regarding claim 35 [39, 45, 49], Nakashima et al. teaches the method in claim 32 [37, 42, 47], wherein said change status commands are selected from the group consisting of a Read Device Slot Changed Status with Timeout command, a Read Enclosure Changed Status with Timeout command, and combinations thereof (column 11, lines 19-24 of Nakashima et al.).

Nakashima et al. does not teach read and write commands. Giorgio et al. teaches said change status commands are selected from the group consisting of a Read Device Slot Changed Status command, a Read Enclosure Changed Status command (column 2, lines 53-59 of Giorgio et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that

the invention was made to further modify the network monitoring system of Nakashima et al. by having read and write commands because these are used to receive and store status information.

Regarding claim 37, Nakashima et al. teaches a method for reading a changed status for a target device, where the command may optionally include a nonzero timer timeout (column 11, lines 19-24 of Nakashima et al.); waiting, by the host adapter, for the target device to disconnect, and once disconnected continuing other activities scheduled for other devices; receiving the tag and the command by the target device, and for commands issued without a timeout, gathering current status from the enclosure components and comparing the freshly gathered current status with the prior stored status; monitoring, by said host adapter, for any target device request for reconnection; if there has been no reportable change in status then the target device continues to gather status and monitor status changes until the comparison indicates there has been a reportable change in status; when a reportable change in status is identified, the target device reconnects to the host adapter, and returns the tag and the current enclosure status to the host adapter; reconnection of the target device with said host adapter; sending the status from the target device and the host adapter receiving the tag returned by the target device with the status; and retrieving said memory pointer associated with said received tag and storing the target device status data into memory at that memory location (column 2, lines 43-45 and column 4, lines 41-43 of Nakashima et al.).

Nakashima et al. does not teach of a host adaptor and reservation of memory for status information. Giorgio et al. teaches said method comprising steps of issuing a change status command by a host adapter (column 3, lines 21-23 of Giorgio et al.); generating a pointer to a location in memory that will be used when the enclosure or slot status data is transferred from

target device (column 1, lines 42-43 of Giorgio et al.); creating a tag for the command; selecting a particular target device, said selection of the target device resulting in the establishment of a connection between said host adapter and said target device; sending a tag by said host adapter to said selected target device giving it disconnect privilege when a command is received; sending a command to the target device (column 2, lines 53-59 of Giorgio et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. by having a host adaptor and reservation of memory for status information because the host adapter is used for communication and a memory slot is needed for new status information.

Regarding claim 41, Nakashima et al. teaches a program module that directs the computer system or components thereof, to function in a specified manner to determine if a target device supports a change status type command and to enable said device for said change status type command when said target device supports such command (column 1, lines 38-41 of Nakashima et al.), receiving inquiry data in response to said inquiry command from said target device; determining if an indicator in said inquiry data is a first predetermined state; and enabling said device for change status commands only if said indicator has said first predetermined state and not enabling said device for said change status commands if said flag does not have said first predetermined state (column 10, lines 52-56 of Nakashima et al.).

Nakashima et al. does not teach computer program or an inquiry command. Giorgio et al. teaches a computer program product for use in conjunction with a computer system, the computer program product comprising a computer readable storage medium and a computer program mechanism embedded therein, the computer program mechanism (column 4, lines 12-

14 of Giorgio et al.), comprising: the program module including instructions for: selecting a particular selected target device; sending an inquiry command to said selected target device (column 3, lines 21-23 and 26 of Giorgio et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. by having computer program or an inquiry command because a program is needed to instruct the hardware in how to process the information and commands are needed to send and store status data.

Regarding claim 47, Nakashima et al. teaches said command optionally including a non-zero timer timeout (column 11, lines 19-24 of Nakashima et al.); waiting for said target device to disconnect, and once disconnected, continuing other activities scheduled for other devices; receiving the tag and the command by the target device, and for commands issued without a timeout, gathering current status and comparing the gathered current status with stored status from an earlier status gathering to identify a reportable status change; monitoring for any target device request for reconnection; if there has been no reportable change in status then the target device continuing to gather status and monitor status changes until said comparison identifies a reportable change in status; when a reportable change in status is identified, said target device reconnecting to the host adapter, and returning the tag and the current status to the host adapter; reconnecting said target device with said host adapter; sending said status from the target device and receiving the tag returned by the target device with the status; and retrieving said memory pointer associated with said received tag and storing the target device status data into memory at that memory location (column 2, lines 43-45 and column 4, lines 41-43 of Nakashima et al.).

Nakashima et al. does not teach a computer program, host adapters and pointers in memory. Giorgio et al. teaches a computer program product for use in conjunction with a computer system, the computer program product comprising a computer readable storage medium and a computer program mechanism embedded therein, the computer program mechanism (column 4, lines 12-14 of Giorgio et al.), comprising: a program module that directs the computer system or components thereof, to function in a specified manner to read a changed status for a target device, the program module including instructions for: issuing a change status command by a host adapter (column 3, lines 21-23 of Giorgio et al.); generating a pointer to a location in memory for used when status data is transferred from said target device (column 1, lines 42-43 of Giorgio et al.); creating a tag for said change status command; selecting a particular target device and establishing a communication connection between said host adapter and said selected target device; sending said tag to said selected target device giving it disconnect privilege when a command is received; sending a command to the target device (column 2, lines 53-59 of Giorgio et al.).Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. by having computer program, host adapters and pointers in memory because the program directs the hardware on how to process the information, the host adapter is used for communication, and a memory slot is needed for new status information.

Regarding claim 51, Nakashima et al. teaches comparison logic for determining if said inquiry data includes an indicator indicating that said target device supports a change status command type (column 1, lines 38-41 of Nakashima et al.); and enabling logic for enabling said target device for change status commands only if said indicator is present and indicates that said

target device supports said change status commands, and enabling said device for polled status commands if said flag does not so indicate (column 10, lines 52-56 of Nakashima et al.).

Nakashima et al. does not teach a host adapter and inquiry command. Giorgio et al. teaches a host adapter comprising: a target device selector for selecting a particular selected target device; inquiry command generation means for generating an inquiry command; a communication port for communicating said inquiry command to said selected target device and for receiving inquiry data from said target device in response to said inquiry command (column 2, lines 53-58 of Giorgio et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. by having a host adapter and inquiry command because a host adapter and commands are needed for communication.

Regarding claim 3, Nakashima et al. teaches the method in claim 2, wherein said status is selected from the group consisting of a device status, a component status, a slot status, and combinations thereof (column 1, lines 23-25 of Nakashima et al.).

Referring to claim 4, Nakashima et al. teaches the method in claim 1, wherein said subsystem comprises a second processor and said status is communicated between said first processor and said second processor (column 2, lines 43-46 of Nakashima et al.).

Regarding claim 33, Nakashima et al. teaches the method in claim 32, wherein said flag comprises a command queue flag of said inquiry data (column 10, lines 52-56 of Nakashima et al.).

Referring to claim 36, Nakashima et al. teaches the method in claim 32, wherein the command queue flag state is established for a particular target device prior to issuing the inquiry command (column 10, lines 52-56 of Nakashima et al.).

Regarding claim 40, Nakashima et al. teaches the method in claim 37, wherein when the optional non-zero timer timeout parameters are specified in the command said method further comprising steps of: after receiving the command from the host adapter, determining whether the command specifies a timeout parameter; if a timeout parameter is specified, then performing, by the SEP, incrementing or decrementing a timer count and when the timer count value reaches a predetermined counter value, gathering the required status and reconnecting to the host adapter; and returning status and tag to the host adapter (column 4, lines 41-43 and column 11, lines 19-24 of Nakashima et al.).

Referring to claim 42, Nakashima et al. teaches the computer program product in claim 41, wherein when said device is not enabled for change status commands when said indicator does not have said first predetermined state, enabling said device for polled status commands if said flag does not have said first predetermined state (column 1, lines 42-47 and column 10, lines 52-56 of Nakashima et al.).

Regarding claim 43, Nakashima et al. teaches the computer program product in claim 41, wherein said indicator comprises a command queue flag of said inquiry data (column 10, lines 52-56 of Nakashima et al.).

Referring to claim 46, Nakashima et al. teaches the method in claim 43, wherein the command queue flag state is established for a particular target device prior to issuing the inquiry command (column 10, lines 52-56 of Nakashima et al.).

Regarding claim 50, Nakashima et al. teaches the computer program product in claim 47, wherein when the optional non zero timer timeout parameters are specified in the command, and said program module further including instructions for: determining whether the command specifies a timeout parameter after receiving the command from the host adapter; if a timeout parameter is specified, then performing, by the SEP, incrementing or decrementing a timer count and when the timer count value reaches a predetermined counter value, gathering the required status and reconnecting to the host adapter; and returning status and tag to the host adapter (column 4, lines 41-43 and column 11, lines 19-24 of Nakashima et al.).

Referring to claim 52, Nakashima et al. teaches the host adapter in claim 51, wherein said indicator comprises a command queue flag of said inquiry data (column 10, lines 52-56 of Nakashima et al.).

3. Claim 2, 6-31, 38, 48, and 53 rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,470,385 to Nakashima et al. in view of Giorgio et al. as applied to claim1, 3-5, 32-37, 39-47, and 49-52 above, and further in view of Erickson et al.

Regarding claim 2, Nakashima et al. in view of Giorgio et al. teaches the method in Claim 1, wherein said first processor comprises a host adapter (column 3, lines 21-23 of Giorgio et al.).

Nakashima et al. in view of Giorgio et al. does not teach a SAF-TE enclosure. Erickson et al. teaches said subsystem comprises a SAF-TE enclosure, and said component comprises a SAF-TE Processor (SEP) device (column 2, lines 47-49 and 63-65 of Erickson et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was

made to further modify the network monitoring system of Nakashima et al. in view of Giorgio et al. by having a SAF-TE enclosure because this is a type of protocol used with SCSI.

Regarding claim 6, Nakashima et al. teaches a method for monitoring a status change in a target device, logically disconnecting said SAF-TE controlling said target device from said bus after receipt of said command; and logically reconnecting said SAF-TE to said SCSI bus only when said predefined minimum change has occurred and communicating a response including said changed status (column 4, lines 41-43 of Nakashima et al.).

Nakashima et al. does not teach SCSI, commands, and a host adapter. Giorgio et al. teaches the method comprising the steps of issuing, by a host adapter coupled to said SAF-TE by a SCSI bus (column 3, lines 21-23 of Giorgio et al.), a single command sequence which includes a request for a status report for said target device only when a predefined minimum change has occurred in the status of said target device (column 2, lines 53-59 of Giorgio et al.); communicating a response to said host adapter (column 3, lines 21-23 of Giorgio et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. by having SCSI, commands, and a host adapter because commands and the host adapter are used for communication as well as the SCSI protocol.

Nakashima et al. in view of Giorgio et al. does not teach SAF-TE. Erickson et al. teaches monitoring a status change in a SCSI Accessed Fault-Tolerant Enclosure (SAF-TE) target device (column 2, lines 47-49 and 63-65 of Erickson et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further

modify the network monitoring system of Nakashima et al. in view of Giorgio et al. by using SAF-TE because this is a type of protocol used with SCSI.

Regarding claim 7, Nakashima et al. in view of Giorgio et al. teaches the method in Claim 6 and target device (column 3, line 26 of Giorgio et al.).

Nakashima et al. in view of Giorgio et al. does nót teach SAF-TE. Erickson et al. teaches said target device comprises a SAF-TE slot and said status change comprises a change in status of a SAF-TE slot (column 2, lines 47-49 and 63-65 of Erickson et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. in view of Giorgio et al. by using SAF-TE because this is a type of protocol used with SCSI.

Referring to claim 8, Nakashima et al. in view of Giorgio et al. teaches the method in Claim 6 and target device (column 3, line 26 of Giorgio et al.).

Nakashima et al. in view of Giorgio et al. does not teach SAF-TE. Erickson et al. teaches said target device comprises a SAF-TE component and said status change comprises a change in status of a SAF-TE component (column 2, lines 47-49 and 63-65 of Erickson et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. in view of Giorgio et al. by using SAF-TE because this is a type of protocol used with SCSI.

Regarding claim 9, Nakashima et al. in view of Giorgio et al. teaches the method in claim 6 and target device (column 3, line 26 of Giorgio et al.).

Nakashima et al. in view of Giorgio et al. does not teach SAF-TE component. Erickson et al. teaches said target device comprises a SAF-TE component disk drive and said status change

comprises a change in status of a SAF-TE disk drive (column 2, lines 47-49 and 63-65 and column 5, line 4 of Erickson et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. in view of Giorgio et al. by using SAF-TE component because this is a type of protocol used with SCSI.

Regarding claim 10, Nakashima et al. teaches the method in claim 6 (column 4, lines 41-43 of Nakashima et al.).

Nakashima et al. does not teach a command sequence. Giorgio et al. teaches said single command sequence comprises a single fixed sequence of commands that is issued to solicit a future change in status from a target device without periodic polling of said target device or of an enclosure containing said target device (column 2, lines 53-59 of Giorgio et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. by having a command sequence because this command sequence guides communication.

Regarding claim 11, Nakashima et al. teaches the method in claim 6 (column 4, lines 41-43 of Nakashima et al.).

Nakashima et al. does not teach a command sequence. Giorgio et al. teaches said command sequence includes a command sent by a requestor to retrieve a target device status when said target device has a status change, and said command allows disconnection from a communication link coupling said requestor to said target device after said command has been received and reconnection to said communication link after said status has changed so that said changed status maybe communicated to said requestor (column 2, lines 53-59 and column 3, line

27 of Giorgio et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. by having a command sequence because this command sequence guides communication.

Regarding claim 12, Nakashima et al. teaches the method in Claim 11 and said communication link (column 1, lines 17-18 of Nakashima et al.).

Nakashima et al. does not teach a computer bus. Giorgio et al. teaches said communication link comprises a computer bus (column 1, lines 29-31 of Giorgio et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. by having a computer bus because a bus is a type of communication link.

Referring to claim 13, Nakashima et al. teaches the method in Claim 11 and said communication link (column 1, lines 17-18 of Nakashima et al.).

Nakashima et al. does not teach a SCSI bus. Giorgio et al. teaches said communication link comprises a SCSI bus (column 1, lines 29-31 of Giorgio et al.).Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. by having a SCSI bus because a SCSI bus is a type of communication link.

Regarding claim 14, Nakashima et al. teaches the method in claim 11 (column 4, lines 41-43 of Nakashima et al.).

Nakashima et al. does not teach a host adapter coupled to a host computer. Giorgio et al. teaches said requestor includes a host adapter coupled to a host computer (column 3, lines 20-22

of Giorgio et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. by having a host adapter coupled to a host computer because a adapter performs the communication from the computer.

Regarding claim 20, Nakashima et al. teaches the method in Claim 6, and said status returned in response (column 2, lines 44-47 of Nakashima et al.).

Nakashima et al. does not teach of commands. Giorgio et al. teaches said command send by said requestor to retrieve a target device status (column 2, lines 53-55 of Giorgio et al.) when said target device has a status change has the same status information format and field definition as for status returned in response to a conventional polled status command (column 5, line 31 of Giorgio et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. by having commands because commands guide communication.

Regarding claim 21, Nakashima et al. teaches the method in claim 20, and said polled status command (column 1, lines 42-46 of Nakashima et al.).

Nakashima et al. does not teach read and write commands. Giorgio et al. teaches said polled status command is selected from the group consisting of a Write Device Slot Status command, a Read Device Slot Status command, and a read enclosure status command (column 2, lines 53-59 of Giorgio et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. by having read and write commands because these are used to receive and store status information.

Regarding claim 22, Nakashima et al. teaches the method in Claim 6 (column 4, lines 41-43 of Nakashima et al.).

Nakashima et al. does not teach said command sequence. Giorgio et al. teaches said command sequence includes at least one command having an associated tag and said command is issued with said associated tag as a tagged command; and said method further comprising the step of issuing a first tagged command and subsequently issuing a second tagged command before said first tagged command completes execution (column 2, lines 53-59 of Giorgio et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. by said command sequence because this command sequence guides communication.

Referring to claim 24, Nakashima et al. in view of Giorgio et al. teaches the method in claim 6, wherein said device monitors the status of each component without being interrupted by host adapter periodic SAF-TE status polling (column 1, lines 42-47 of Nakashima et al.) so that overhead in each of said host adapter and said SEP is reduced and additional processing bandwidtn is available in said host adapter and said SEP to perform other operations (column 1, lines 59-62 of Nakashima et al.).

Nakashima et al. in view of Giorgio et al. does not teach SAF-TE processor (SEP) device. Erickson et al. teaches SAF-TE processor (SEP) device (column 2, lines 47-49 and 63-65 of Erickson et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. in view of Giorgio et al. by having a SAF-TE processor (SEP) device because using SAF-TE because this is a type of protocol used with SCSI.

Regarding claim 28, Nakashima et al. teaches the method in Claim 6 (column 4, lines 41-43 of Nakashima et al.).

Nakashima et al. does not teach status command sequences. Giorgio et al. teaches a plurality of status command sequences have been issued prior to receiving a response to change status; and said method further comprising the step of aborting other outstanding status commands when a changed status is reported and thereby allowing response only to a new change status command (column 1, lines 42-43 and column 2, lines 53-59 of Giorgio et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. by having a status command sequences because is command sequence guides communication.

Regarding claim 29, Nakashima et al. teaches the method in Claim 6 and communication link (column 1, lines 18-19 of Nakashima et al.).

Nakashima et al. does not teach of commands. Giorgio et al. teaches said commands may be communicated to multiple target devices on the same communication link (column 1, lines 29-31 and column 3, line 26 of Giorgio et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. by having commands because commands guide communication.

Regarding claim 38 [48, 53], Nakashima et al. in view of Giorgio et al. teaches the method in claim 37 [47, 51] and said target device (column 3, line 26 of Giorgio et al.).

Nakashima et al. in view of Giorgio et al. does not teach a SAF-TE Processor (SEP) device. Erickson et al. teaches said target device comprises a SAF-TE Processor (SEP) device

(column 2, lines 47-49 and 63-65 of Erickson et al.). Therefore it would have been obvious to one of ordinary skill in the art at the time that the invention was made to further modify the network monitoring system of Nakashima et al. in view of Giorgio et al. by having a SAF-TE Processor (SEP) device because using SAF-TE because this is a type of protocol used with SCSI.

Regarding claim 15, Nakashima et al. teaches the method in claim 6, wherein said response from a target device is generated only when a status value change of a predetermined amount occurs relative to a reference status value (column 4, lines 41-43 of Nakashima et al.).

Referring to claim 16, Nakashima et al. teaches the method in claim 15, wherein said predetermined amount is any amount of change (column 4, lines 41-43 of Nakashima et al.).

Regarding claim 17, Nakashima et al. teaches the method in claim 15, wherein said predetermined amount is a percentage change compared to a previous value (column 4, lines 41-43 of Nakashima et al.).

Referring to claim 18, Nakashima et al. teaches the method in claim 15, wherein said predetermined amount comprises a status value that exceeds a predetermined threshold value (column 4, lines 41-43 of Nakashima et al.).

Regarding claim 19, Nakashima et al. teaches the method in claim 15, wherein said predetermined amount is specified programmatically (column 4, lines 41-43 of Nakashima et al.).

Referring to claim 23, Nakashima et al. teaches the method in claim 6, wherein said command sequence may be issued at any arbitrary time so that a response to said command is generated upon the detection of a change in status of the target device (column 4, lines 41-43 of Nakashima et al.).

Regarding claim 25, Nakashima et al. teaches the method in claim 6, wherein said command sequence includes a command having a command parameter setting a timer response time, said command causing generation of a response upon the expiration of said timer response time (column 11, lines 19-24 of Nakashima et al.).

Referring to claim 26, Nakashima et al. teaches the method in Claim 25, wherein when said timer response time expires, status being generated and communicated to a status requestor (column 11, lines 19-24 of Nakashima et al.).

Regarding claim 27, Nakashima et al. teaches the method in Claim 25, wherein when said timer response time expires, status being generated and communicated to a status requestor without disrupting a pending read changed status request command which generates a status only upon the occurrence of a reportable change (column 11, lines 19-24 of Nakashima et al.).

Referring to claim 30, Nakashima et al. teaches the method in claim 6, wherein said change status and polling commands co-exist on a single system (column 1, lines 38-41 of Nakashima et al.).

Regarding claim 31, Nakashima et al. teaches the method in claim 6, wherein said change status and polling commands co-exist on a single bus (column 1, lines 38-41 of Nakashima et al.).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to April L Baugh whose telephone number is 703-305-5317. The examiner can normally be reached on Monday-Friday 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on 703-308-5221. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-9149 for regular communications and 703-746-9149 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

ALB
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